International Journal of Fracture

CONTENTS OF VOLUME 99 (1999)

Vol. 99, No. 1-2, 1999

Foreword		v–vi
Curriculum Vitae	GRIGORY ISAAKOVICH BARENBLATT	vii–xiv
Intersonic crack propagation in an orthotropic material	K.B. BROBERG	1–11
Microstructural aspects of fracture mechanics	VLADIMIR ENTOV	13–23
On 3d cracks intersecting a free surface in laminated composites	D. LEGUILLON and E. SANCHEZ-PALENCIA	25–40
The effect of the stress-relative displacement law on failure predictions using the cohesive zone model	E. SMITH	41–51
Modeling of bonding at an interface crack	ROBERT GOLDSTEIN and MICHAEL PERELMUTER	53–79
Edge-cracks in single crystals under monotonic and cyclic loads	JOHN W. HUTCHINSON and VIGGO TVERGAARD	81–95
Prediction of the work of separation and implications to modeling	T. SIEGMUND and W. BROCKS	97–116
Approximate closed form weight function for an elliptical crack in an infinite body	A. J. KRASOWSKY, I.V. ORYNYAK and A.Yu. GIENKO	117–130
On correlation of various approaches for description of kinetic processes	L.R. BOTVINA	131–141

Vol. 99, No. 3, 1999

Table of Contents		iii
Preface	M.L. WILLIAMS	v
Foreword	LESLIE BANKS-SILLS	vii–viii

A methodology for measuring interface fracture properties of composite materials	LESLIE BANKS-SILLS, NAHUM TRAVITZKY, DANA ASHKENAZI and RAMI ELIASI	143–160
Three-dimensional analysis of thermal shock effect on inner semi-elliptical surface cracks in a cylindrical pressure vessel	M. PERL and Y. GREENBERG	161–170
A mode I crack parallel to the interfaces in a periodically layered medium	MICHAEL RYVKIN	171–186
A note on evaluating the fracture energy of thin ceramic layers by cleavage	DOV SHERMAN and SA'AR RAHAV	187–197
Thermomechanical aspects of dynamic crack initiation	D. RITTEL	199–209

Vol. 99, No. 4, 1999

Quantification of geometry and material mismatch constraint in steel weldments with fusion line cracks	Ø. RANESTAD, Z.L. ZHANG and C. THAULOW	211–237
Stress intensities derived from stresses around a spot weld	SHICHENG ZHANG	239–257
Computation of stress intensity factors by using global crack-line displacement fitting procedure	ZAILIANG LI and ZONGJIN LI	259–279
Weight function for an inclined edge crack in a semiplane	M. BEGHINI, L. BERTINI and V. FONTANARI	281–292
The behavior of screw dislocations emitted from a star crack with a central hole	BI-TRONG CHEN, CHEN-TI HU and SANBOH LEE	293–306
Crack closure in spherical shells	RONG LIU, C.H. WANG and R.G. BATHGATE	307–323
Numerical simulation of a mixed-mode dynamic fracture experiment	TH. SEELIG, D. GROSS and K. POTHMANN	325–338
Volume contents / Author index		339–341